

THE ROTARY-ENGINE
SUZUKI

Smoothest engine ever

It looks like no other motorcycle in the world. It works like no other motorcycle in the world. It even sounds like no other motorcycle in the world.

The Suzuki RE-5 rotary is a touring machine. Like no other touring machine in the world.

It spins out power.

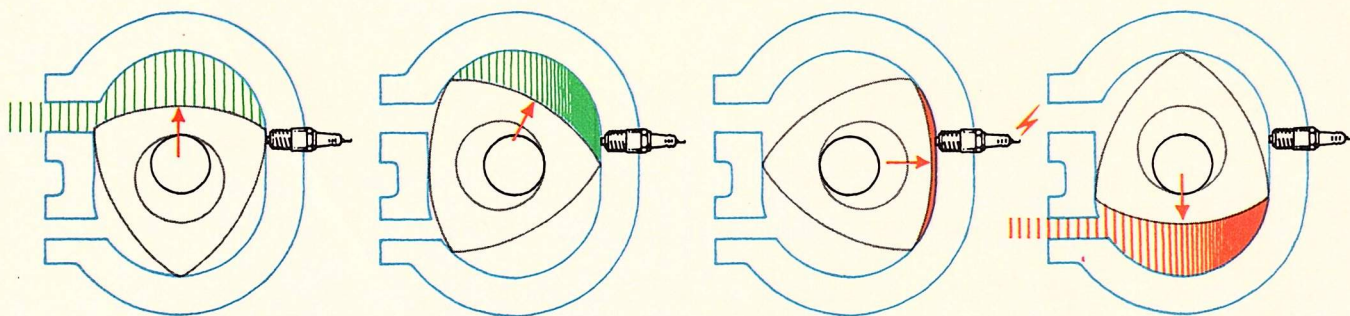
The RE-5 rotary engine spins out power. Instead of pistons that pump up and down, it has a rotor that turns around. The rotor is geared directly to the eccentric shaft. This eliminates the need for connecting rods or wristpins—and eliminates the vibration they can cause.

The RE-5 runs so smoothly that rubber engine mounts are unnecessary.

One rotor is like three pistons.

Each face of the 3-sided rotor acts like a single piston; taking in fuel, compressing it, igniting it, and exhausting the fumes. With every revolution of the rotor, three firing cycles are completed. The eccentric shaft receives a smooth, continuous supply of power.

Instead of winding up the rpms and running out of torque, the engine feels like it could keep on spinning out power—almost without end.



Each face of the rotor acts like a piston—going thru intake, compression, ignition and exhaust.

Peripheral ports.

The RE-5 uses three peripheral intake ports to preserve smooth acceleration right into the upper speed range—without any “surging” or gasping for gas.

The three ports work with a two-barrel, two-stage carburetor. Two small ports supply the fuel needed for idling and low speeds. Then, as rpms increase, a vacuum-controlled valve in the large secondary port opens to supply more fuel.

CDI ignition.

Suzuki's Capacitor Discharge Ignition provides the accurate ignition needed for the RE-5. The speed relay and vacuum switch inside the mechanism are linked to provide feedback to the ignition switch according to engine speed.

A double point system provides optimum

sparkling and reduces plug fouling.

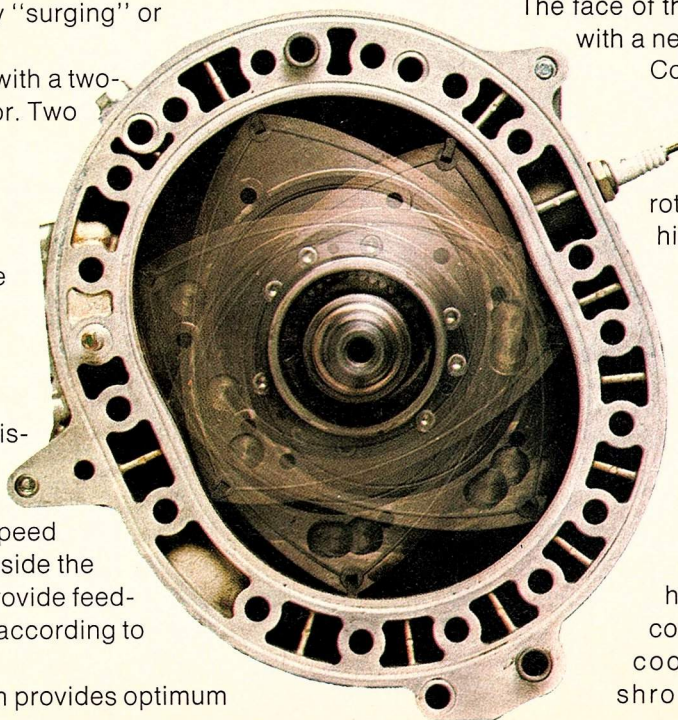
CEM, a new metal plating.

The face of the rotor housing is treated with a new patented plating, CEM, Composite Electrochemical Material. After many tests under severe running conditions, CEM-treated rotor housings have proven highly resistant to abrasion.

Dual cooling systems.

The RE-5 has a dual cooling system: liquid cooling for the rotor housings and oil cooling for the rotor itself.

The upper three-fourths of the radiator houses coils for the liquid cooling system. An electric cooling fan mounted in a shroud behind the radiator



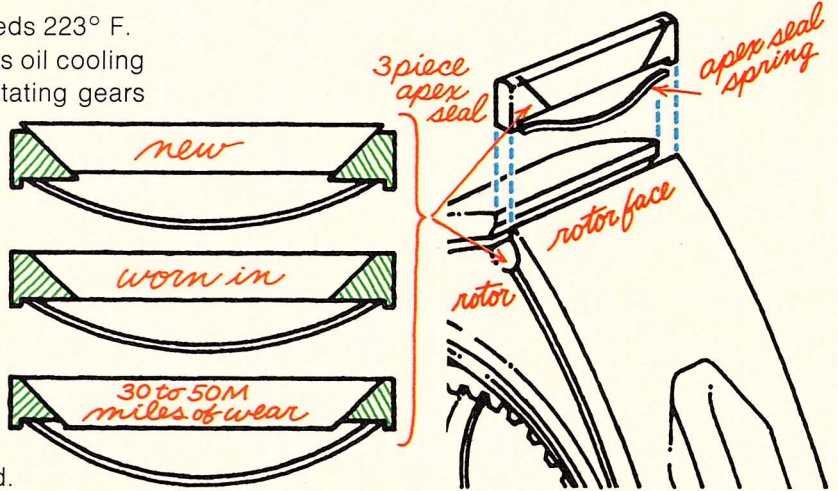
put in a motorcycle.

cuts in whenever the coolant exceeds 223° F.

The lower part of the radiator holds oil cooling coils. Oil is pumped over the rotor, rotating gears and bearings on the eccentric shaft. It collects in a sump and is pumped thru an oil filter, back to the radiator.

Self-adjusting apex seals.

One of the most critical areas in any rotary engine is the seal at the rotor tips. Suzuki has developed a special three-piece, self-adjusting apex seal that adjusts to wear and maintains a tight interface with the rotor housing. Gas blowby is minimized. Compression is maximized.



Twin-shell exhaust.

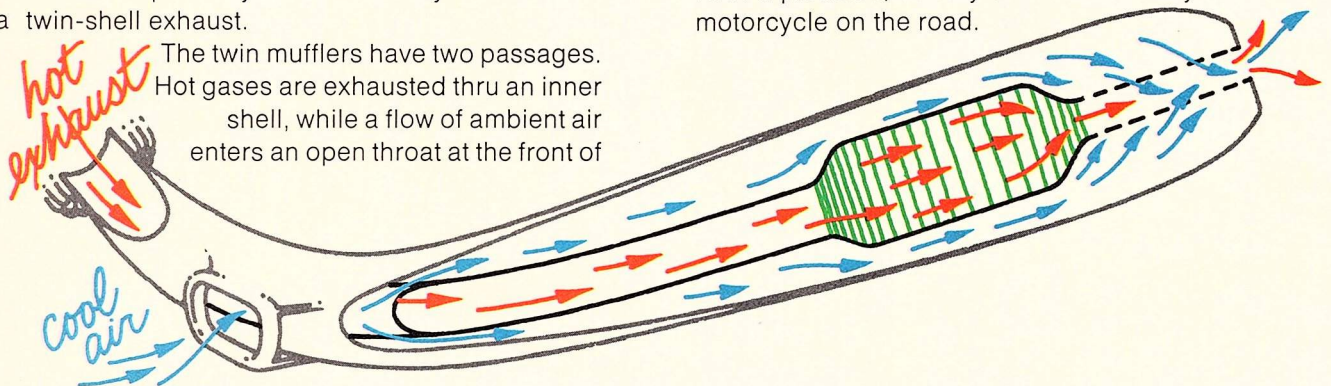
The exhaust from a rotary is much hotter than from a piston engine. So once again Suzuki engineers developed a system found only on the RE-5: a twin-shell exhaust.

The twin mufflers have two passages. Hot gases are exhausted thru an inner shell, while a flow of ambient air enters an open throat at the front of

each muffler and rushes thru the outer shell.

The result is cool, quiet muffling.

With a pleasant, throaty sound unlike any other motorcycle on the road.



A unique engine. A unique motorcycle.

The RE-5 rotary engine sets new standards of excellence in motorcycle engineering. But don't overlook the rest of the machine. It's big, handsome, and easy to get along with.

There isn't enough space here to discuss all the RE-5's features, but when you visit your Suzuki dealer, he'll be glad to point them out.

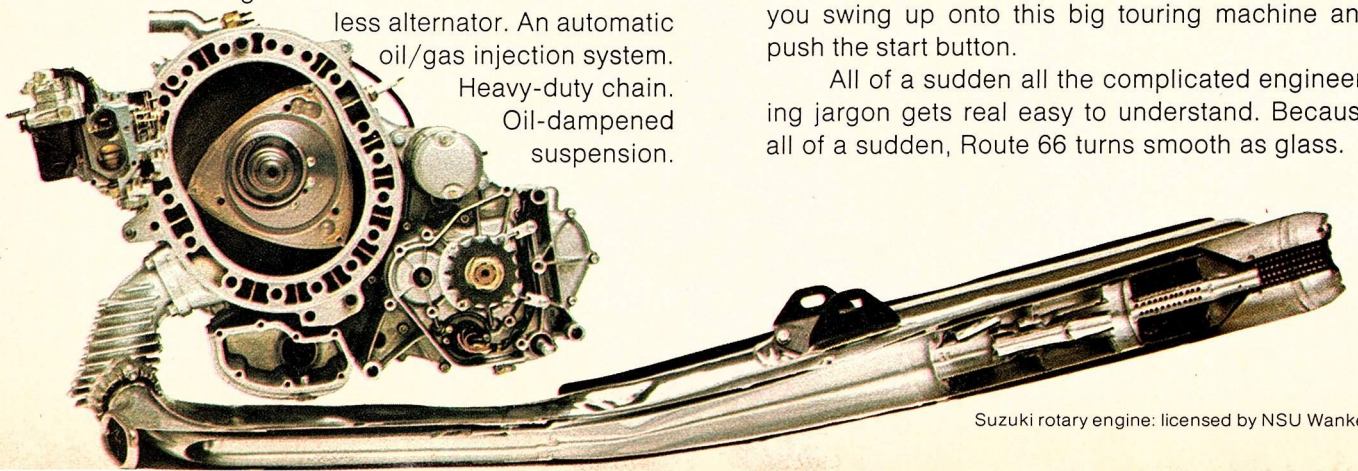
Like the big twin disc front brakes. A new brushless alternator. An automatic oil/gas injection system. Heavy-duty chain. Oil-dampened suspension.

Big two-up deep-cushion seat. A gas tank that holds 4.5 gallons. A futuristic instrument panel with speedometer, tach, water temperature gauge and digital gear indicator — plus lights for turn signals, high beam, neutral and low fuel, RE oil or oil pressure.

Stop reading. Go ride one.

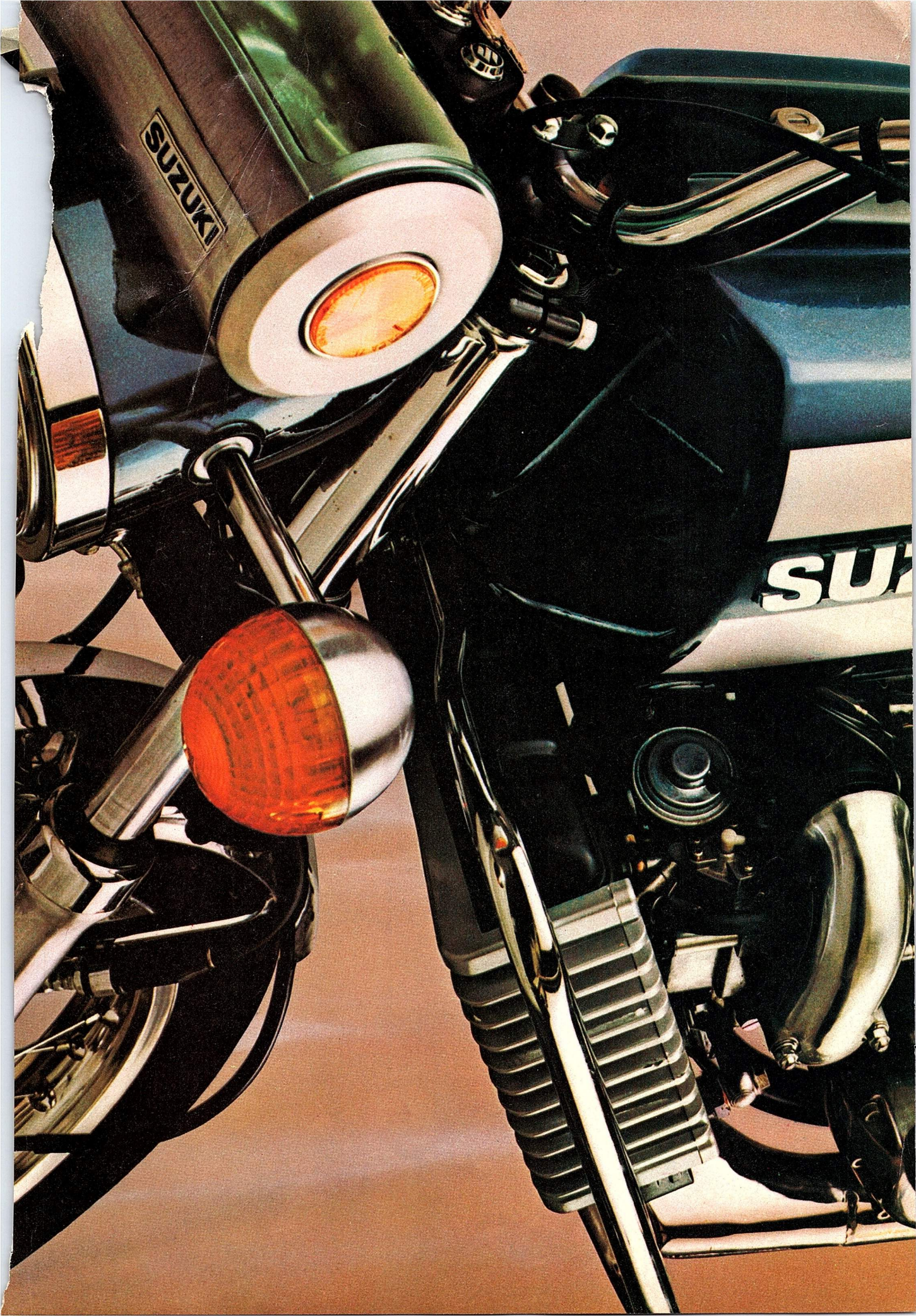
The RE-5 sounds great on paper. But wait until you swing up onto this big touring machine and push the start button.

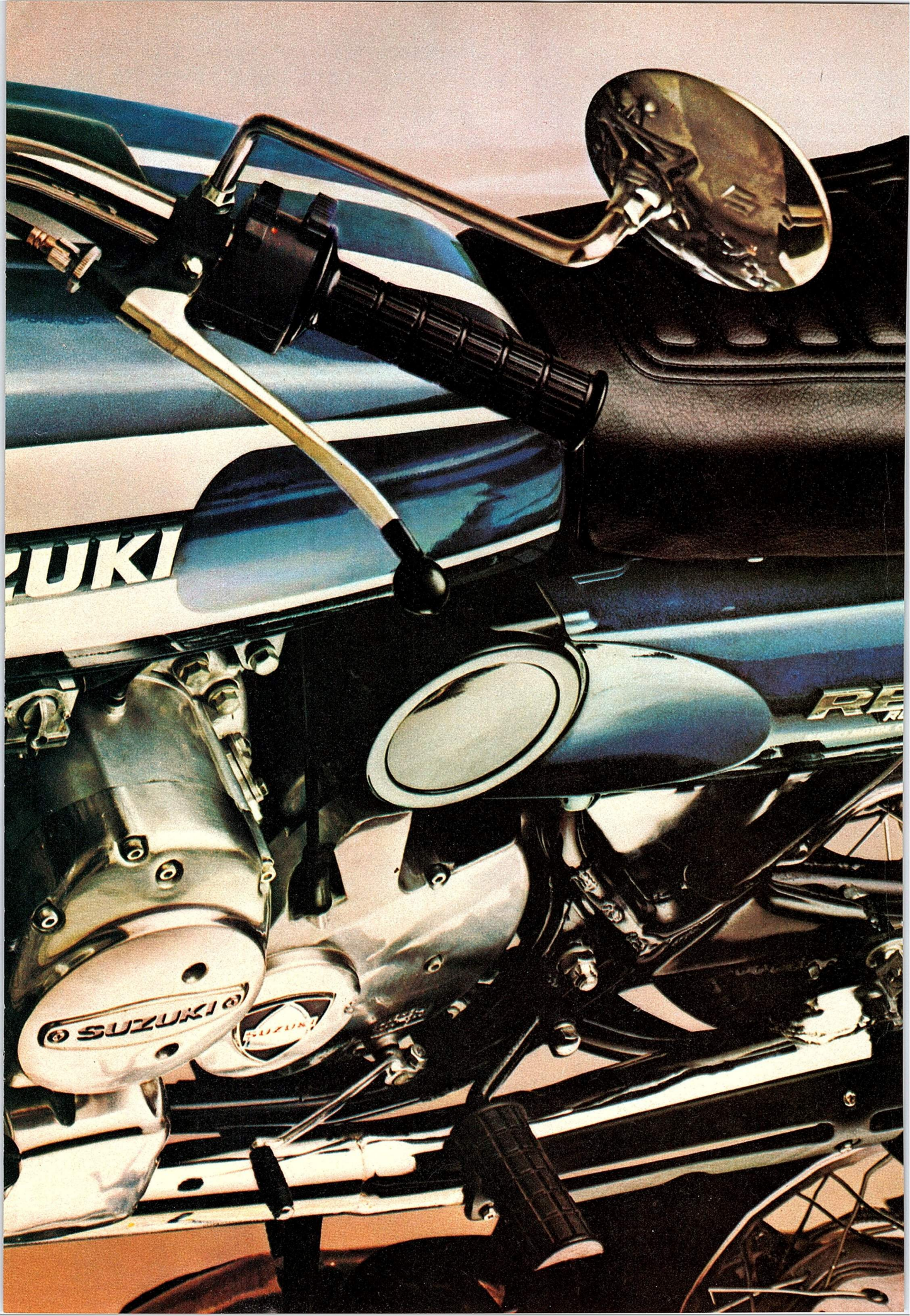
All of a sudden all the complicated engineering jargon gets real easy to understand. Because all of a sudden, Route 66 turns smooth as glass.



**Route 66
just turned
smooth as
glass.**









Engine Type: NSU-Wankel rotary, liquid cooled Displacement: 497 cc Horsepower: 62 hp @ 6,500 rpm

Torque: 54.9 ft. / lb. @ 3,500 rpm Compression Ratio: 9.4:1 Carburetor: Mikuni, 18-32 HHD

Starter System: Electric and kick Transmission: 5-speed, constant mesh

Suspension:

Front fork...Telescopic,
oil-dampened

Rear swing arm...
Oil-dampened, 5-way
adjustable

Brakes:

Front...Hydraulic caliper dual disc

Rear...Internal expanding

Fuel Tank Capacity: 4.5 gal.

Ground Clearance: 6.7 in.

Tires: Front...3.25H19-4PR, Rear...4.00H18-4PR Wheel Base: 59.1 in.

Length: 87.4 in. Width: 34.3 in. Height: 46.1 in. Dry Weight: 507 lbs.

Colors: Firemist Blue, Firemist Orange

Suzuki warrants all internal parts of the rotor housing, rotor, transmission case and oil pumps for 12 months or 12,000 miles. Purchaser must comply with Owner's Manual instructions: mail registration to Suzuki within 48 hours, and receive service checks from an authorized Suzuki dealer at 750, 2,000 and every 2,000 miles thereafter.

U.S. Suzuki Motor Corporation, Dept.
4063, Santa Fe Springs, Calif. 90670.



Ride safely; wear a helmet, eye protection, and appropriate riding apparel.

RE-5